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REMARKS

Claims 10-16, 19, 21 and 39-49 are currently pending in the subject application and are presently under consideration. Claims 10-16, 19 and 21 have been amended herein to further emphasize various novel aspects of the subject invention. Claims 39-49 are newly added. Claims 17, 18, 22-26 and 28 have been cancelled without prejudice or disclaimer. A listing of all claims can be found at pages 2-6. Favorable consideration of the subject patent application is respectfully requested in view of the comments and amendments herein.

I. Rejection of Claims 10-16 and 21 Under 35 U.S.C. §103(a)

Claims 10-16 and 21 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Munakata, *et al.* (U.S. Patent No. 4,827,143) in view of Yufa (U.S. Patent No. 6,034,769) and Tamai (JP-411167890). It is respectfully submitted that this rejection should be withdrawn for at least the following reasons. Independent claim 10 has been amended to further emphasize that *attenuated* light is detected and that *dynamic* chamber cleaning occurs *during* photoresist coating and development. The combination of Munakata, *et al.*, Yufa and Tamai does not teach or suggest such claimed aspects. Thus, Munakata, *et al.*, Yufa and Tamai, alone or in combination, do not make obvious the subject claims pursuant 35 U.S.C. §103.

In particular, independent claim 10 recites receiving *attenuated* light from a light transmission path. (See application, pp.6-7, ll.32-3 and p.3, ll.9-15). Munakata, *et al.* does not disclose receiving attenuated light from a transmission path. Rather, Munakata, *et al.* is directed to detecting *scattered* light. As disclosed in Munakata, *et al.*, the detecting fibers are "specifically" utilized for "capturing the beams of *scattered* light from particles..." (See col.5, ll. 29-33; see also col.5, ll. 10-34). (Emphasis added). Munakata *et al.* does not mention detecting attenuated light transmissions.

In addition, independent claim 10 recites *dynamic* chamber cleaning that occurs *during* photoresist coating and development. As disclosed in the subject application, a particle count in a chamber is continuously monitored, and at least a portion of the particles are dynamically removed during photoresist coating and development when the particle count exceeds a threshold. The Examiner concedes that Munakata, *et al.* does not teach or suggest dynamic chamber cleaning, but contends that Tamai discloses dynamic chamber cleaning. The Examiner references the Abstract and figure 1 of Tamai to provide support for such contention.

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However, the referenced section and figure of Tamai do not teach or suggest dynamic cleaning as recited in claim 10. Instead, these sections of Tamai disclose activating a cleaning mode when a gate valve 17 and a material transporting in/out valve 18 are closed. Thus, unlike applicants' claimed invention, which recites dynamic removal of particles (automatically whenever a particle count exceeds a threshold), Tamai discloses a *non*-dynamic technique, wherein the system has to *close valves* (gate and transporting) and then *transition to a cleaning mode* before the chamber can be cleaned. Moreover, Tamai is silent regarding removing particles during processing.

In view of at least the foregoing, it is respectfully requested that the rejection of independent claim 10 (and claims 11-16 and 21, which depend therefrom) be withdrawn.

II. Rejection of Claims 16 and 19 Under 35 U.S.C. §103(a)

Claims 16 and 19 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Munakata, *et al.*, Yufa, and Tamai as applied to claim 10, and further in view of Harwell, *et al.* (U.S. Patent No. 5,942,672). This rejection should be withdrawn for at least the following reasons. Claims 16 and 19 depend from independent claim 10 and Harwell, *et al.* fails to make up for the aforementioned deficiencies of Munakata, *et al.* regarding detecting attenuated transmission and dynamically cleaning a chamber during substrate processing. Rather, Harwell, *et al.* is directed to calibrating a particle monitor. Thus, for at least the reasons described *supra*, it is respectfully requested that this rejection of claims 16 and 19 be withdrawn.

III. New claims 39-49

Claims 39-49 have been added to further emphasize various novel aspects of the subject invention. These claims recite novel aspects similar to those described above. Entry and allowance of these claims are respectfully requested.

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CONCLUSION


The present application is believed to be in condition for allowance in view of the above comments and amendments. A prompt action to such end is earnestly solicited.

In the event any fees are due in connection with this document, the Commissioner is authorized to charge those fees to Deposit Account No. 50-1063.

Should the Examiner believe a telephone interview would be helpful to expedite favorable prosecution, the Examiner is invited to contact applicants' undersigned representative at the telephone number listed below.

Respectfully submitted,

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